REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 1, 9, 10, 15, 16, 18, 19, and 21 - 24 are currently being amended. This amendment changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

The examiner has objected to claims 1, 9, 15, 18, 23, and 24. Claims 1, 9, 15, and 18 stand rejected under 35 U.S.C. §112, first paragraph. Claims 1, 9, 15 and 18 stand rejected under 35 U.S.C. §102(e) as being anticipated by Gupta and claims 21 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gupta. Applicant respectfully traverses this rejection.

The examiner requested that claims 1, 9, 15, 18, 23, and 24 be amended to correct certain "informalities." The examiner has also rejected claims 1, 9, 15, and 18 under 35 U.S.C. §112, first paragraph. However, Applicant believes that many of the examiner's objections and the examiner's 112 rejection are based on a misreading of the claims. For example, the examiner argues that claims 1, 9, 15, and 18 recite "retransmitting all of the requested data." Applicant believes the examiner understands this to mean that all of the data originally sent via the point-to-multipoint session is resent. This reading of the claims is incorrect. Instead, claims 1, 9, 15, and 18 claim retransmitting the all data that was not received but was expected. This is the "requested data" recited in the claims. Applicant has amended the claims to address the misunderstanding. As such, Applicant has not accepted the examiner's proposed claim amendments to claim 23, line 6 (1st suggested amendment), claim 1, line 7 (2nd suggested amendment), claim 15, line 10 (6th suggested amendment), claim 18, lines 6 and 7 (7th and 8th suggested amendments), and claim 23, line 10 (9th suggested amendment). Applicant has accepted the examiner's suggested amendments to claim 9, lines 1 and 2 (3rd suggested amendment), claim 9, lines 3 and 5 (4th and 5th suggested amendments) and claim 24, lines 3 and 5 (10th and 11th suggested amendments).

With respect to the rejections based on 35 U.S.C. §§102 and 103, the examiner argues that the remarks on pages 8-10 of Applicants' response to the previous office action are unpersuasive. The examiner argues that col. 6, lines 14-23 and the abstract of Gupta teach "a method and an apparatus for efficient and reliable multicasting in a network environment and a sender transmits data packets to a plurality of receiver wherein periodically, receivers submit response that include control information regarding the loss (expected data not received) or receipt of data packets transmitted by the sender and using these information a sender retransmits any undelivered packets to intended receivers." However, Gupta does not teach retransmitting all of the not received data via a point-to-multipoint session.

As argued in response to the previous office action, Gupta discloses a system for monitoring and adjusting the data transmission rate and receiver response rate in a multicasting computer network based on changes in the number of receivers in the network and/or the data-loss responses from the receivers. The sender retransmits the most requested lost data in a multicast session and transmits data which failed to reach only a few receivers in a unicast session directly to each of these few receivers.

The subject application discloses methods and systems for repairing lost data in a multicasting system. In contrast to Gupta, claims 1-24 of the subject application recite transmitting data via a point-to-multipoint session, determining if any expected data was not received, and retransmitting *all of* the not received data via the point-to-multipoint session. The subject application specifically recognizes the problems taken by the Gupta reference in paragraphs 22 and 23 of the subject application and proposes a solution to these problems. Specifically, the subject application recognizes that retransmitting only the most NACKed packets may not lead to total error recovery. It also recognizes that determining the most requested packets may be difficult or impossible. In addition, by retransmitting all of the not received data, it is possible that some of the receivers may receive lost data in the retransmission even before sending a request for the lost data thus reducing network traffic. As such, the subject application as claimed in claims 1-24 proposes a solution to some of the problems associated with the Gupta reference.

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Nothing in the Gupta reference discloses or suggests retransmitting *all of* the not received data as claimed in claims 1-24 of the subject application. In fact, Gupta discloses resending only the most NACKed packets, which causes some of the problems specifically identified and solved by the subject application. As such, the applicant respectfully submits that for this reason alone the Gupta reference neither discloses or suggests the invention as claimed in claims 1-24 of the subject application. Therefore, the application requests the rejection of claim 1-24 be withdrawn.

With respect to claims 21 and 22, the examiner states that the arguments Applicant made in response to the previous office action are not persuasive because Gupta teaches decides "when to multicast and when to unicast ... according to a heuristic (scheduled) (an analytically calculated predetermined approach), or based on the number of participating receivers and responses submitted by them at the time of retransmission (see col. 12, lines 47-51) which is basically the same method except the applicant uses a different expression such as scheduling repair session etc ..." However, this statement is incorrect.

As argued in response to the previous office action, the Gupta reference provides absolutely no teaching or suggestion on how point-to-point repair sessions are scheduled. The examiner admits that "Gupta et al. do[es] not explicitly teach scheduling point-to-multipoint repair session." The section of the Gupta reference cited by the examiner (Col. 12, lines 47-51) discloses whether to multicast or unicast lost data. Addition sections of the Gupta reference cited by the examiner disclose controlling the rate at which the sender transmits data and the rate at which the receivers send lost data NACK messages back to the sender. Gupta neither discloses or suggests any method for scheduling point-to-point repair session. Deciding whether to use multicast or unicast is certainly different than scheduling a point-to-point repair session.

In contrast, in the subject application, the decision to use a point-to-point repair session is made before scheduling the point-to-point repair session is done. The subject application discloses and claims sending data still not received after retransmitting all of the not received data via the point-to-multipoint session in individual point-to-point sessions with specific receivers. The subject application discloses and claims various methods of

scheduling the point-to-point repair sessions including using a randomization mechanism and/or sending a point-to-point repair token to the receivers announcing when point-to-point repair will begin. Specially, claims 21 and 22 of the subject application recite scheduling (delaying) the point-to-point repair sessions after the decision to schedule a point-to-point data repair session has already been made. Nothing in Gupta discloses or teaching how to scheduling (delaying) a point-to-point repair session.

In addition, the examiner's rejection of claims 21 and 22 is improper because he provides absolutely no support for his argument that a person having an ordinary skill in the art at the time the invention was made would have found the difference between the claimed subject matter and the Gupta reference obvious. The examiner acknowledges that Gupta does not teach this difference, but nevertheless argues that the modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so because it would be relatively [sic] and yet high reliable in operation" When specific claim limitations are missing, the examiner is required to explain why or how the prior art or the general knowledge of the art provides a teaching, suggestion or motivation to modify the prior art to produce the claimed structure. *In re Gal*, 25 USPT2d 1076, 1079 (Fed.Cir. 1992).

In this case, the prior art does not disclose or suggest delaying a scheduled point-to-point repair session based on the number of receivers on a point-to-multipoint session or on randomization values computed based on the number of receivers using a point-to-multipoint session. The only possible suggestion or motivation to include these features comes from the applicant's own disclosure. It is improper for the examiner to use hindsight reconstruction wherein the examiner uses the applicant's own disclosure as a blueprint to reconstruct the claimed invention out of unrelated isolated teaching in the prior art. *In re Oetiker*, 24 USPQ2d 1443, 1446 (Fed.Cir. 1992). As such, the applicant respectfully requests the examiner withdraw the outstanding rejection of claims 21 and 22.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

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Atty. Dkt. No. 037145-3101

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1450. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1450. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1450.

Respectfully submitted,

Date JULY 24, 2006   By _____

FOLEY & LARDNER LLP   G. Peter Albert, Jr.
Customer Number: 30542   Attorney for Applicant
Telephone: (858) 847-6735   Registration No. 37,268
Facsimile: (858) 792-6773

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